

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/812,393DATE: 04/28/98
TIME: 13:04:20

INPUT SET: S25310.raw

This Raw Listing contains the General
Information Section and those Sequences
containing ERRORS.

Does Not Comply
Corrected Diskette Needed

SEQUENCE LISTING

1
2
3 (1) General Information
4
5 (i) APPLICANT: SHERMAN, Linda A.
6 LUSTGARTEN, Joseph
7
8 (ii) TITLE OF THE INVENTION: RECOMBINANT CONSTRUCTS ENCODING
9 T CELL RECEPTORS SPECIFIC FOR HUMAN HLA-RESTRICTED TUMOR
10 ANTIGENS
11
12 (iii) NUMBER OF SEQUENCES: 64
13
14 (iv) CORRESPONDENCE ADDRESS:
15 (A) ADDRESSEE: MORRISON & FOERSTER
16 (B) STREET: 2000 Pennsylvania Avenue, NW, suite 5500
17 (C) CITY: Washington
18 (D) STATE: DC
19 (E) COUNTRY: USA
20 (F) ZIP: 20006-1888
21
22 (v) COMPUTER READABLE FORM:
23 (A) MEDIUM TYPE: Diskette
24 (B) COMPUTER: IBM Compatible
25 (C) OPERATING SYSTEM: DOS
26 (D) SOFTWARE: FastSEQ for Windows Version 2.0
27
28 (vi) CURRENT APPLICATION DATA:
29 (A) APPLICATION NUMBER: 08/812,393
30 (B) FILING DATE: 05-MAR-1997
31 (C) CLASSIFICATION:
32
33 (vii) PRIOR APPLICATION DATA:
34 (A) APPLICATION NUMBER:
35 (B) FILING DATE:
36
37
38
39 (viii) ATTORNEY/AGENT INFORMATION:
40 (A) NAME: Murashige, Kate H
41 (B) REGISTRATION NUMBER: 29,959
42 (C) REFERENCE/DOCKET NUMBER: 31333-20001.00
43
44 (ix) TELECOMMUNICATION INFORMATION:
45 (A) TELEPHONE: 202-887-1500

INPUT SET: S25310.raw

46 (B) TELEFAX: 202-822-0168
47 (C) TELEX:
48
49

ERRORED SEQUENCES FOLLOW:

250 (2) INFORMATION FOR SEQ ID NO:3:
251
252 (i) SEQUENCE CHARACTERISTICS:
253 (A) LENGTH: 24 base pairs
254 (B) TYPE: nucleic acid
255 (C) STRANDEDNESS: single
256 (D) TOPOLOGY: linear
257
258 (vi) ORIGINAL SOURCE:
--> 259 (C) ISOLATE: V-alpha-1) *globally replace -- repetitive error*
260
261 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:
262
263 CCCAAGGCAC TGATGTTTCAT CTTC
264

24

265 (2) INFORMATION FOR SEQ ID NO:4:
266
267 (i) SEQUENCE CHARACTERISTICS:
268 (A) LENGTH: 27 base pairs
269 (B) TYPE: nucleic acid
270 (C) STRANDEDNESS: single
271 (D) TOPOLOGY: linear
272
273 (vi) ORIGINAL SOURCE:
--> 274 (C) ISOLATE: V-alpha-2
275
276 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:
277
278 TGAGACAAAG TCCCCAATCT CTGACAG
279

27

280 (2) INFORMATION FOR SEQ ID NO:5:
281
282 (i) SEQUENCE CHARACTERISTICS:
283 (A) LENGTH: 26 base pairs
284 (B) TYPE: nucleic acid
285 (C) STRANDEDNESS: single
286 (D) TOPOLOGY: linear
287
288 (vi) ORIGINAL SOURCE:
--> 289 (C) ISOLATE: V-alpha-3
290

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291 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

292

293 CTGCAGCTGC TCCTCAAGTA CTATTC

26

294

295 (2) INFORMATION FOR SEQ ID NO:6:

296

297 (i) SEQUENCE CHARACTERISTICS:

298 (A) LENGTH: 28 base pairs

299 (B) TYPE: nucleic acid

300 (C) STRANDEDNESS: single

301 (D) TOPOLOGY: linear

302

303 (vi) ORIGINAL SOURCE:

--> 304 (C) ISOLATE: V-alpha-4.1.2.3

305

306 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

307

308 TCCCGGAGAA GGTCCACAGT TCCTCTTT

28

309

310 (2) INFORMATION FOR SEQ ID NO:7:

311

312 (i) SEQUENCE CHARACTERISTICS:

313 (A) LENGTH: 29 base pairs

314 (B) TYPE: nucleic acid

315 (C) STRANDEDNESS: single

316 (D) TOPOLOGY: linear

317

318 (vi) ORIGINAL SOURCE:

--> 319 (C) ISOLATE: V-alpha-4.4

320

321 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

322

323 GAAGCAGCAG AGGGTTTGAA GCCACATAC

29

324

325 (2) INFORMATION FOR SEQ ID NO:8:

326

327 (i) SEQUENCE CHARACTERISTICS:

328 (A) LENGTH: 27 base pairs

329 (B) TYPE: nucleic acid

330 (C) STRANDEDNESS: single

331 (D) TOPOLOGY: linear

332

333 (vi) ORIGINAL SOURCE:

--> 334 (C) ISOLATE: V-alpha-5

335

336 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

337

338 GGCAGGTCTT CAGTTGCTTA TGAAGGT

27

339

340 (2) INFORMATION FOR SEQ ID NO:9:

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```
341
342      (i) SEQUENCE CHARACTERISTICS:
343          (A) LENGTH: 27 base pairs
344          (B) TYPE: nucleic acid
345          (C) STRANDEDNESS: single
346          (D) TOPOLOGY: linear
347
348      (vi) ORIGINAL SOURCE:
--> 349          (C) ISOLATE: V-alpha-6
350
351      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:
352
353      GGTTCCTCTT CAGGGTCCAG AATATGT
354
355      (2) INFORMATION FOR SEQ ID NO:10:
356
357      (i) SEQUENCE CHARACTERISTICS:
358          (A) LENGTH: 27 base pairs
359          (B) TYPE: nucleic acid
360          (C) STRANDEDNESS: single
361          (D) TOPOLOGY: linear
362
363      (vi) ORIGINAL SOURCE:
--> 364          (C) ISOLATE: V-alpha-7
365
366      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:
367
368      GCGAAGAAGT CACCCTGGAC TGTCAT
369
370      (2) INFORMATION FOR SEQ ID NO:11:
371
372      (i) SEQUENCE CHARACTERISTICS:
373          (A) LENGTH: 30 base pairs
374          (B) TYPE: nucleic acid
375          (C) STRANDEDNESS: single
376          (D) TOPOLOGY: linear
377
378      (vi) ORIGINAL SOURCE:
--> 379          (C) ISOLATE: V-alpha-8
380
381      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:
382
383      GAGCTCCACA GACAACAAGA GGACCGAGCA
384
385      (2) INFORMATION FOR SEQ ID NO:12:
386
387      (i) SEQUENCE CHARACTERISTICS:
388          (A) LENGTH: 27 base pairs
389          (B) TYPE: nucleic acid
390          (C) STRANDEDNESS: single
```

RAW SEQUENCE LISTING
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391 (D) TOPOLOGY: linear
392
393 (vi) ORIGINAL SOURCE:
--> 394 (C) ISOLATE: V-alpha-9
395
396 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:
397
398 GAGCTGCGAC GTTCCTTAGT GACTGTG 27
399

400 (2) INFORMATION FOR SEQ ID NO:13:
401
402 (i) SEQUENCE CHARACTERISTICS:
403 (A) LENGTH: 30 base pairs
404 (B) TYPE: nucleic acid
405 (C) STRANDEDNESS: single
406 (D) TOPOLOGY: linear
407
408 (vi) ORIGINAL SOURCE:
--> 409 (C) ISOLATE: V-alpha-10
410
411 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:
412
413 CCTCGTCAGC CTGTTGTCCA ATCCTTCTGG 30
414

415 (2) INFORMATION FOR SEQ ID NO:14:
416
417 (i) SEQUENCE CHARACTERISTICS:
418 (A) LENGTH: 28 base pairs
419 (B) TYPE: nucleic acid
420 (C) STRANDEDNESS: single
421 (D) TOPOLOGY: linear
422
423 (vi) ORIGINAL SOURCE:
--> 424 (C) ISOLATE: V-alpha-11
425
426 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:
427
428 CAGCCTCATC AATCTGTTCT ACTTGGCT 28
429

430 (2) INFORMATION FOR SEQ ID NO:15:
431
432 (i) SEQUENCE CHARACTERISTICS:
433 (A) LENGTH: 28 base pairs
434 (B) TYPE: nucleic acid
435 (C) STRANDEDNESS: single
436 (D) TOPOLOGY: linear
437
438 (vi) ORIGINAL SOURCE:
--> 439 (C) ISOLATE: V-alpha-12
440

RAW SEQUENCE LISTING
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INPUT SET: S25310.raw

441 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

442

443 CCACCAGGGA CCACAGTTTA TCATTCAA

28

444

445 (2) INFORMATION FOR SEQ ID NO:16:

446

447 (i) SEQUENCE CHARACTERISTICS:

448 (A) LENGTH: 27 base pairs

449 (B) TYPE: nucleic acid

450 (C) STRANDEDNESS: single

451 (D) TOPOLOGY: linear

452

453 (vi) ORIGINAL SOURCE:

--> 454 (C) ISOLATE: V-alpha-14

455

456 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

457

458 ACCTGGAGAG AATCCTAAGC TCATCAT

27

459

460 (2) INFORMATION FOR SEQ ID NO:17:

461

462 (i) SEQUENCE CHARACTERISTICS:

463 (A) LENGTH: 28 base pairs

464 (B) TYPE: nucleic acid

465 (C) STRANDEDNESS: single

466 (D) TOPOLOGY: linear

467

468 (vi) ORIGINAL SOURCE:

--> 469 (C) ISOLATE: V-alpha-15

470

471 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

472

473 AGGTCTTGTG TCCCTGACAG TCCTGGTT

28

474

475 (2) INFORMATION FOR SEQ ID NO:18:

476

477 (i) SEQUENCE CHARACTERISTICS:

478 (A) LENGTH: 30 base pairs

479 (B) TYPE: nucleic acid

480 (C) STRANDEDNESS: single

481 (D) TOPOLOGY: linear

482

483 (vi) ORIGINAL SOURCE:

--> 484 (C) ISOLATE: V-alpha-16

485

486 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

487

488 CAAGCAAACA CTGTAGTGCA GAGCCCTTCC

30

489

490 (2) INFORMATION FOR SEQ ID NO:19:

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491
492 (i) SEQUENCE CHARACTERISTICS:
493 (A) LENGTH: 25 base pairs
494 (B) TYPE: nucleic acid
495 (C) STRANDEDNESS: single
496 (D) TOPOLOGY: linear
497
498 (vi) ORIGINAL SOURCE:
--> 499 (C) ISOLATE: V-alpha-17
500
501 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:
502
503 CAAGACATCC ATAAGTCCCC TACAG 25
504

505 (2) INFORMATION FOR SEQ ID NO:20:
506
507 (i) SEQUENCE CHARACTERISTICS:
508 (A) LENGTH: 27 base pairs
509 (B) TYPE: nucleic acid
510 (C) STRANDEDNESS: single
511 (D) TOPOLOGY: linear
512
513 (vi) ORIGINAL SOURCE:
--> 514 (C) ISOLATE: V-alpha-18
515
516 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:
517
518 GTGTATGAAA CCCAGGACAG TTCTTAC 27
519

520 (2) INFORMATION FOR SEQ ID NO:21:
521
522 (i) SEQUENCE CHARACTERISTICS:
523 (A) LENGTH: 29 base pairs
524 (B) TYPE: nucleic acid
525 (C) STRANDEDNESS: single
526 (D) TOPOLOGY: linear
527
528 (vi) ORIGINAL SOURCE:
--> 529 (C) ISOLATE: V-alpha-19
530
531 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:
532
533 CCGTATTCTT TTCTTATGTT GTTTGGAT 29
534

535 (2) INFORMATION FOR SEQ ID NO:22:
536
537 (i) SEQUENCE CHARACTERISTICS:
538 (A) LENGTH: 28 base pairs
539 (B) TYPE: nucleic acid
540 (C) STRANDEDNESS: single

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541 (D) TOPOLOGY: linear
542
543 (vi) ORIGINAL SOURCE:
--> 544 (C) ISOLATE: V-alpha-20
545
546 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:
547
548 CAAAGCTCTC CATCGCTGAC TGTTCAG 28
549

550 (2) INFORMATION FOR SEQ ID NO:23:
551
552 (i) SEQUENCE CHARACTERISTICS:
553 (A) LENGTH: 23 base pairs
554 (B) TYPE: nucleic acid
555 (C) STRANDEDNESS: single
556 (D) TOPOLOGY: linear
557
558 (vi) ORIGINAL SOURCE:
--> 559 (C) ISOLATE: V-beta-1
560
561 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:
562
563 ATCTAATCCT GGGAAGAGCA AAT 23
564

565 (2) INFORMATION FOR SEQ ID NO:24:
566
567 (i) SEQUENCE CHARACTERISTICS:
568 (A) LENGTH: 23 base pairs
569 (B) TYPE: nucleic acid
570 (C) STRANDEDNESS: single
571 (D) TOPOLOGY: linear
572
573 (vi) ORIGINAL SOURCE:
--> 574 (C) ISOLATE: V-beta-2
575
576 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:
577
578 GGCGTCTGGT ACCACGTGGT CAA 23
579

580 (2) INFORMATION FOR SEQ ID NO:25:
581
582 (i) SEQUENCE CHARACTERISTICS:
583 (A) LENGTH: 23 base pairs
584 (B) TYPE: nucleic acid
585 (C) STRANDEDNESS: single
586 (D) TOPOLOGY: linear
587
588 (vi) ORIGINAL SOURCE:
--> 589 (C) ISOLATE: V-beta-3
590

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591 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

592

593 GTGAAAGGGC AAGGACAAAA AGC

23

594

595 (2) INFORMATION FOR SEQ ID NO:26:

596

597 (i) SEQUENCE CHARACTERISTICS:

598 (A) LENGTH: 22 base pairs

599 (B) TYPE: nucleic acid

600 (C) STRANDEDNESS: single

601 (D) TOPOLOGY: linear

602

603 (vi) ORIGINAL SOURCE:

--> 604 (C) ISOLATE: V-beta-4

605

606 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

607

608 GATATGCGAA CAGTATCTAG GC

22

609

610 (2) INFORMATION FOR SEQ ID NO:27:

611

612 (i) SEQUENCE CHARACTERISTICS:

613 (A) LENGTH: 23 base pairs

614 (B) TYPE: nucleic acid

615 (C) STRANDEDNESS: single

616 (D) TOPOLOGY: linear

617

618 (vi) ORIGINAL SOURCE:

--> 619 (C) ISOLATE: V-beta-5.1

620

621 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

622

623 ACATAATCAA AGGAAAGGGA GAA

23

624

625 (2) INFORMATION FOR SEQ ID NO:28:

626

627 (i) SEQUENCE CHARACTERISTICS:

628 (A) LENGTH: 23 base pairs

629 (B) TYPE: nucleic acid

630 (C) STRANDEDNESS: single

631 (D) TOPOLOGY: linear

632

633 (vi) ORIGINAL SOURCE:

--> 634 (C) ISOLATE: V-beta-6

635

636 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

637

638 TCCTGATTGG TCAGGAAGGG CAA

23

639

640 (2) INFORMATION FOR SEQ ID NO:29:

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/812,393DATE: 04/28/98
TIME: 13:04:30

INPUT SET: S25310.raw

```
641
642      (i) SEQUENCE CHARACTERISTICS:
643          (A) LENGTH: 23 base pairs
644          (B) TYPE: nucleic acid
645          (C) STRANDEDNESS: single
646          (D) TOPOLOGY: linear
647
648      (vi) ORIGINAL SOURCE:
--> 649          (C) ISOLATE: V-beta-7
650
651      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:
652
653      TACCTGATCA AAAGAATGGG AGA                                     23
654

```

```
655      (2) INFORMATION FOR SEQ ID NO:30:
656
657      (i) SEQUENCE CHARACTERISTICS:
658          (A) LENGTH: 23 base pairs
659          (B) TYPE: nucleic acid
660          (C) STRANDEDNESS: single
661          (D) TOPOLOGY: linear
662
663      (vi) ORIGINAL SOURCE:
--> 664          (C) ISOLATE: V-beta-8.1
665
666      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:
667
668      ATAACCATGA CAATATGTAC TGG                                     23
669

```

```
670      (2) INFORMATION FOR SEQ ID NO:31:
671
672      (i) SEQUENCE CHARACTERISTICS:
673          (A) LENGTH: 23 base pairs
674          (B) TYPE: nucleic acid
675          (C) STRANDEDNESS: single
676          (D) TOPOLOGY: linear
677
678      (vi) ORIGINAL SOURCE:
--> 679          (C) ISOLATE: V-beta-8.2
680
681      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:
682
683      ATAACCACAA CAACATGTAC TGG                                     23
684

```

```
685      (2) INFORMATION FOR SEQ ID NO:32:
686
687      (i) SEQUENCE CHARACTERISTICS:
688          (A) LENGTH: 23 base pairs
689          (B) TYPE: nucleic acid
690          (C) STRANDEDNESS: single

```

RAW SEQUENCE LISTING
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INPUT SET: S25310.raw

691 (D) TOPOLOGY: linear
692
693 (vi) ORIGINAL SOURCE:
--> 694 (C) ISOLATE: V-beta-8.3
695
696 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:
697
698 ATAGCCACAA CTACATGTAC TGG 23
699

700 (2) INFORMATION FOR SEQ ID NO:33:
701
702 (i) SEQUENCE CHARACTERISTICS:
703 (A) LENGTH: 23 base pairs
704 (B) TYPE: nucleic acid
705 (C) STRANDEDNESS: single
706 (D) TOPOLOGY: linear
707
708 (vi) ORIGINAL SOURCE:
--> 709 (C) ISOLATE: V-beta-9
710
711 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:
712
713 AGCTTGCAAG AGTTGGAAAA CCA 23
714

715 (2) INFORMATION FOR SEQ ID NO:34:
716
717 (i) SEQUENCE CHARACTERISTICS:
718 (A) LENGTH: 23 base pairs
719 (B) TYPE: nucleic acid
720 (C) STRANDEDNESS: single
721 (D) TOPOLOGY: linear
722
723 (vi) ORIGINAL SOURCE:
--> 724 (C) ISOLATE: V-beta-10
725
726 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:
727
728 GATTATGTTT AGCTACAATA ATA 23
729

730 (2) INFORMATION FOR SEQ ID NO:35:
731
732 (i) SEQUENCE CHARACTERISTICS:
733 (A) LENGTH: 23 base pairs
734 (B) TYPE: nucleic acid
735 (C) STRANDEDNESS: single
736 (D) TOPOLOGY: linear
737
738 (vi) ORIGINAL SOURCE:
--> 739 (C) ISOLATE: V-beta-11
740

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/812,393DATE: 04/28/98
TIME: 13:04:32

INPUT SET: S25310.raw

741 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:
742
743 ACAAGGTGAC AGGGAAGGGA CAA 23
744

745 (2) INFORMATION FOR SEQ ID NO:36:
746
747 (i) SEQUENCE CHARACTERISTICS:
748 (A) LENGTH: 23 base pairs
749 (B) TYPE: nucleic acid
750 (C) STRANDEDNESS: single
751 (D) TOPOLOGY: linear
752
753 (vi) ORIGINAL SOURCE:
--> 754 (C) ISOLATE: V-beta-12
755
756 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:
757
758 ACCTACAGAA CCCAAGGACT CAG 23
759

760 (2) INFORMATION FOR SEQ ID NO:37:
761
762 (i) SEQUENCE CHARACTERISTICS:
763 (A) LENGTH: 23 base pairs
764 (B) TYPE: nucleic acid
765 (C) STRANDEDNESS: single
766 (D) TOPOLOGY: linear
767
768 (vi) ORIGINAL SOURCE:
--> 769 (C) ISOLATE: V-beta-13
770
771 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:
772
773 CAGTTGCCCT CGGATCGATT TTC 23
774

775 (2) INFORMATION FOR SEQ ID NO:38:
776
777 (i) SEQUENCE CHARACTERISTICS:
778 (A) LENGTH: 23 base pairs
779 (B) TYPE: nucleic acid
780 (C) STRANDEDNESS: single
781 (D) TOPOLOGY: linear
782
783 (vi) ORIGINAL SOURCE:
--> 784 (C) ISOLATE: V-beta-14
785
786 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:
787
788 GCCGAGATCA AGGCTGTGGG CAG 23
789

790 (2) INFORMATION FOR SEQ ID NO:39:

RAW SEQUENCE LISTING
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INPUT SET: S25310.raw

```
791
792      (i) SEQUENCE CHARACTERISTICS:
793          (A) LENGTH: 23 base pairs
794          (B) TYPE: nucleic acid
795          (C) STRANDEDNESS: single
796          (D) TOPOLOGY: linear
797
798      (vi) ORIGINAL SOURCE:
--> 799          (C) ISOLATE: V-beta-15
800
801      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:
802
803      AGAACCATCT GTAAGAGTGG AAC
804
805      (2) INFORMATION FOR SEQ ID NO:40:
806
807      (i) SEQUENCE CHARACTERISTICS:
808          (A) LENGTH: 23 base pairs
809          (B) TYPE: nucleic acid
810          (C) STRANDEDNESS: single
811          (D) TOPOLOGY: linear
812
813      (vi) ORIGINAL SOURCE:
--> 814          (C) ISOLATE: V-beta-16
815
816      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:
817
818      CATCAAATAA TAGATATGGG GCA
819
820      (2) INFORMATION FOR SEQ ID NO:41:
821
822      (i) SEQUENCE CHARACTERISTICS:
823          (A) LENGTH: 23 base pairs
824          (B) TYPE: nucleic acid
825          (C) STRANDEDNESS: single
826          (D) TOPOLOGY: linear
827
828      (vi) ORIGINAL SOURCE:
--> 829          (C) ISOLATE: V-beta-17
830
831      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:
832
833      GTAGTCCTGA AAAAGGGCAC ACT
834
835      (2) INFORMATION FOR SEQ ID NO:42:
836
837      (i) SEQUENCE CHARACTERISTICS:
838          (A) LENGTH: 22 base pairs
839          (B) TYPE: nucleic acid
840          (C) STRANDEDNESS: single
```

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/812,393DATE: 04/28/98
TIME: 13:04:34

INPUT SET: S25310.raw

841 (D) TOPOLOGY: linear
842
843 (vi) ORIGINAL SOURCE:
--> 844 (C) ISOLATE: V-beta-18
845
846 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:
847
848 CATCTGTCAA AGTGGCACTT CA
849

22

1076 (2) INFORMATION FOR SEQ ID NO:51:
1077
1078 (i) SEQUENCE CHARACTERISTICS:
--> 1079 (A) LENGTH: 8 amino acids
1080 (B) TYPE: amino acid
1081 (C) STRANDEDNESS: single
1082 (D) TOPOLOGY: linear
1083
1084
1085 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:
1086
1087 His Leu Tyr Gln Gly Gln Trp
1088 1 5
1089

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/08/812,393DATE: 04/28/98
TIME: 13:04:36

INPUT SET: S25310.raw

Line	Error	Original Text
259	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-1
274	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-2
289	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-3
304	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-4.1.2.3
319	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-4.4
334	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-5
349	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-6
364	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-7
379	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-8
394	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-9
409	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-10
424	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-11
439	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-12
454	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-14
469	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-15
484	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-16
499	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-17
514	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-18
529	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-19
544	Unknown or Misplaced Identifier	(C) ISOLATE: V-alpha-20
559	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-1
574	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-2
589	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-3
604	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-4
619	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-5.1
634	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-6
649	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-7
664	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-8.1
679	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-8.2
694	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-8.3
709	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-9
724	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-10
739	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-11
754	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-12
769	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-13
784	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-14
799	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-15
814	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-16
829	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-17
844	Unknown or Misplaced Identifier	(C) ISOLATE: V-beta-18
1079	Entered (8) and Calc. Seq. Length (7) differ	(A) LENGTH: 8 amino acids



Notice of Availability of Checker Program

Applicant Aid for Biotechnology Computer Readable Form (CRF)
Sequence Listing Submissions

The Patent and Trademark Office (PTO) has developed a computer program, called Checker, that will aid applicants in identifying and correcting errors prior to making submissions for compliance with the Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures (Sequence Rules: 37CFR 1.821 through 1.825).

Final rules were published in the *Federal Register* (55 FR18230) on May 1, 1990, and in the PTO *Official Gazette* (1114 Off.Gaz.PatOffice 29) on May 15, 1990.

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